

Fig.1

Fig.2

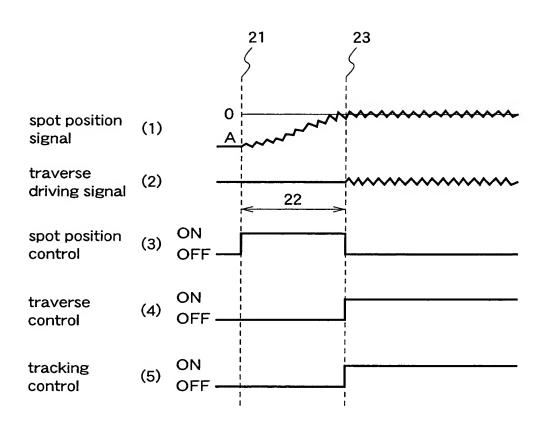


Fig.3

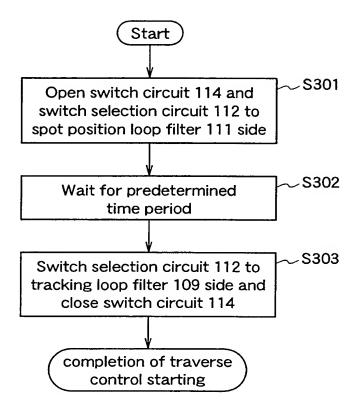


Fig.4

Fig.5

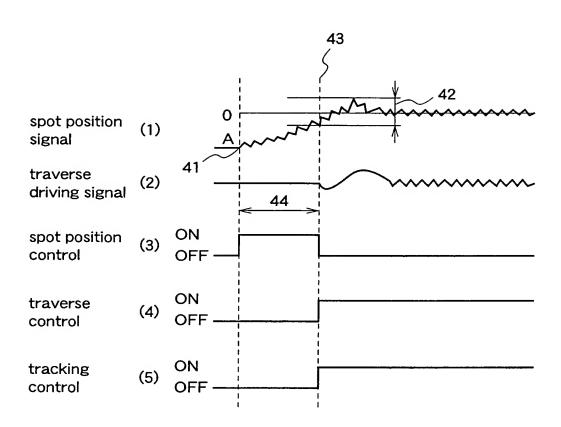


Fig.6

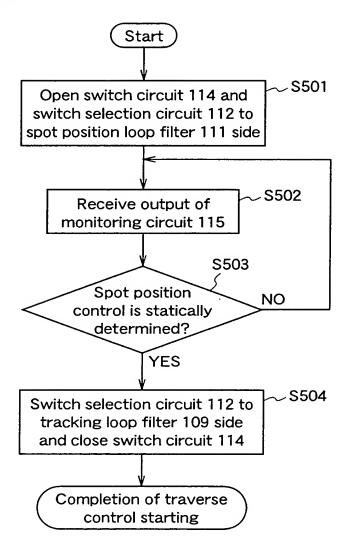


Fig.7

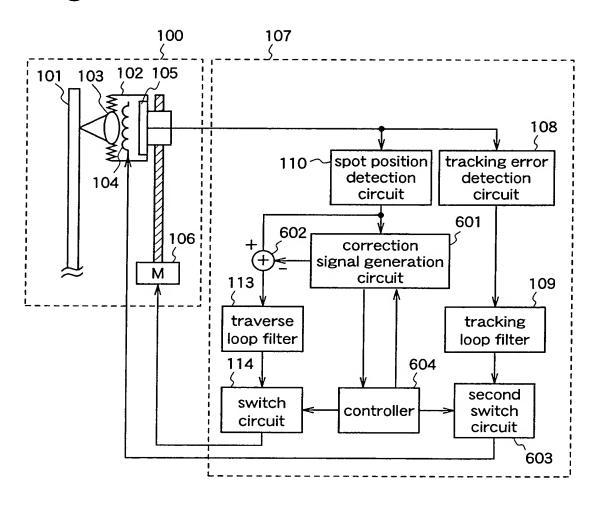


Fig.8

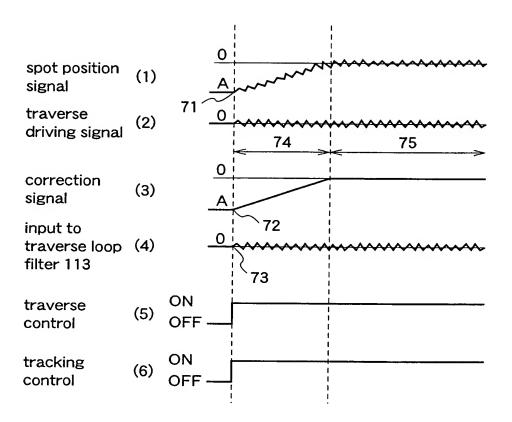


Fig.9

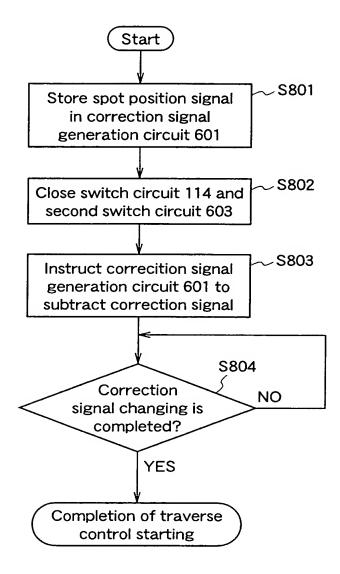


Fig.10

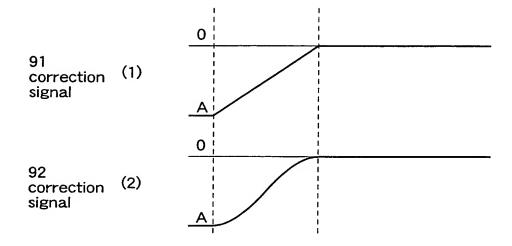


Fig.11

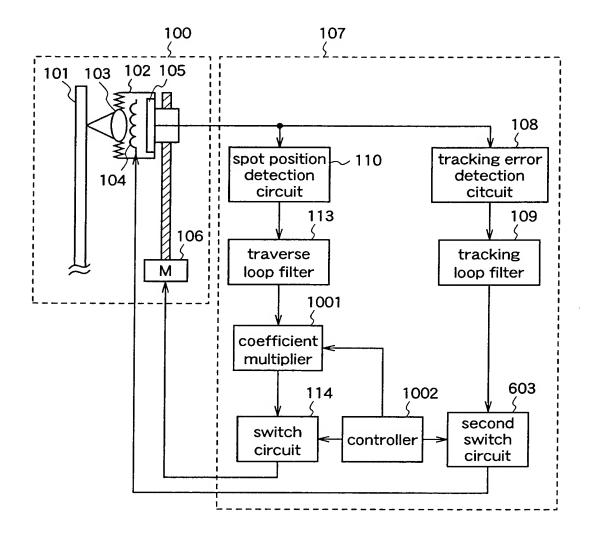


Fig.12

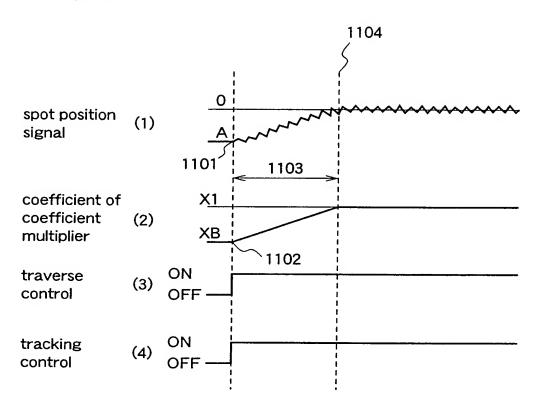


Fig.13

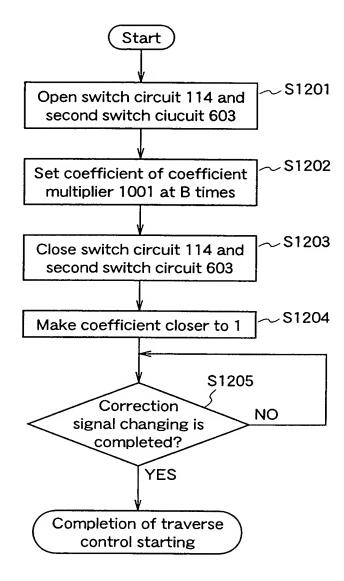


Fig.14 Prior Art

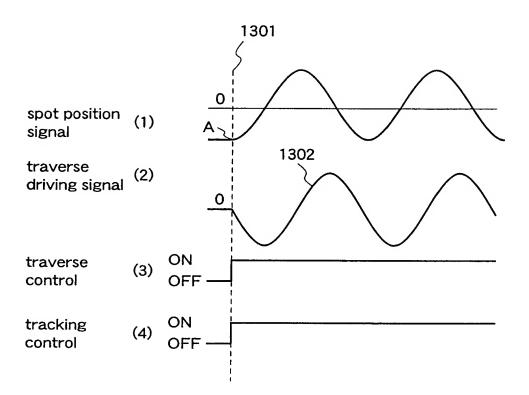


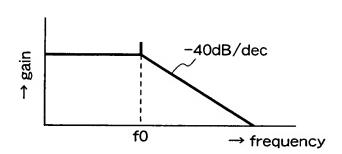
Fig.15 (a)

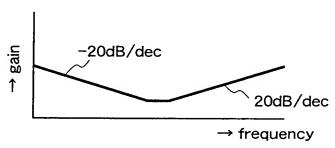
Fig.15 (b)

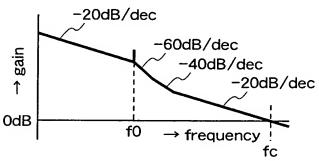
gain characteristics of spot position loop filter 111

Fig.15 (c)

open-loop characteristics of whole spot position control







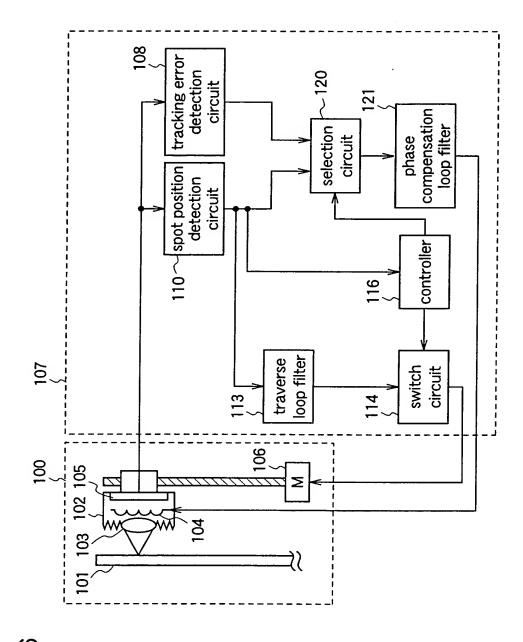


Fig. 16

Fig.17 (a)

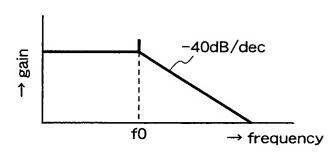


Fig.17 (b)

gain characteristics of spot position loop filter 111

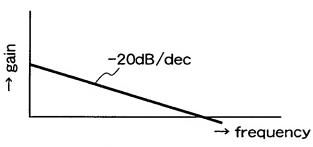


Fig.17 (c)

open-loop characteristics of whole spot position control

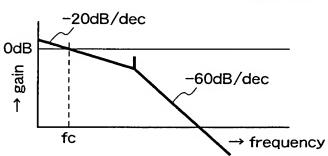


Fig.18 (a)

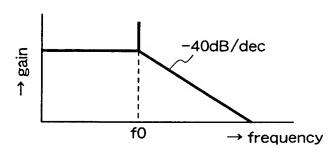


Fig.18 (b)

gain characteristics of spot position loop filter 111

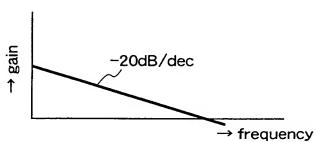
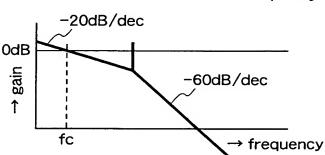


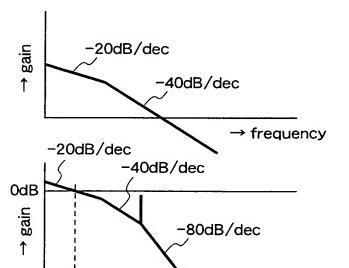
Fig.18 (c)

open-loop characteristics of whole spot position control



## Fig.18 (d)

gain characteristics of changed spot position loop filter 111



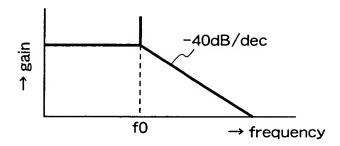
→ frequency

fc

Fig.18 (e)

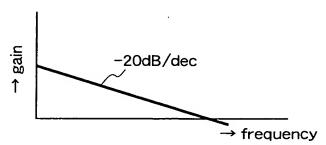
open-loop characteristics of whole changed spot position control

Fig.19 (a)



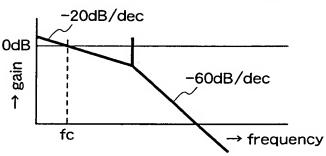
## Fig.19 (b)

gain characteristics of spot position loop filter 111



## Fig.19 (c)

open-loop characteristics of whole spot position control



## Fig.19 (d)

gain characteristics of spot position loop filter 111

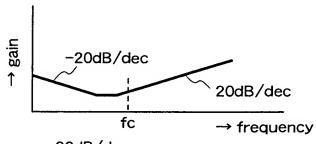


Fig.19 (e)

open-loop characteristics of whole spot position control

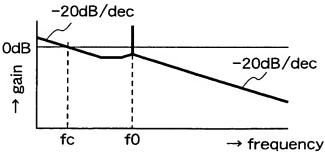


Fig.20 (b) gain characteristics of spot position loop filter 111

Fig.20 (c)
open-loop
characteristics of
whole spot
position control

Fig.20 (d)
open-loop phase
characteristics 181
witout spot position
loop filter 111 and
phase characteristics
182 of spot position
loop filter 111

Fig.20 (e)
phase characteristics
of whole spot
position control

